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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,559	09/27/2001	Jian-Hsing Lee	0941-0332P-SP	8922
2292	7590	12/01/2003	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			BENENSON, BORIS	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/963,559	LEE ET AL.	
	Examiner	Art Unit	
	Boris Benenson	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendments to the claims received on received on 10/20/2003 are entered. Claims 1, 6, 7, 10, 11, 15, 16 and 19 are amended. Claims 4, 5 and 14 are cancelled. New Claim 20 is entered.
2. Amendment to the specification is entered. Abstract of the disclosure is replaced.
3. Amendments to the drawings are entered. Corrected formal drawings (Fig.2 and Fig.3) are approved.
4. Objections to abstract of the disclosure are withdrawn.
5. Objections to the drawings are withdrawn.

RESPONSE TO ARGUMENT

6. Applicant's argument that Ker et al. (5,959,820) does not disclose a voltage-detecting device including at least one serial diode connected between the power wire and the switching circuit in combination with other claim limitations is not convincing. The rejection 35 USC § 103(a) had been made based on obviousness of combining Applicant's Admitted Prior Art with teachings of Ker et al. (5,959,820) and does not suggest that all the limitations are exist in Ker et al. Applicant's Admitted Prior Art provide all the elements with exception of the design of a detection device. Ker et al. teach such device.
7. Applicant's argument that in Ker et al. the voltage detecting device only detects the ESD event which happened on

Art Unit: 2836

the power wire and therefore can not infer the present invention is not convincing, because the voltage detecting device of the current invention is also monitor the power wire "Vcc (core)" and therefore is similar.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-3, 6-13, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Ker et al. (5,959,820). Applicant's Admitted Prior Art disclose almost all the elements of the invention, but did not disclose a voltage detecting device including at least one serial diode connected between the first power wire and switching circuit, outputting the result signal when voltage level of first power wire reaches a first predetermine voltage level. Ker et al. teach a diode string (Fig. 14b, Pos. 204d),

which is connected between a power wire (VDD) and protecting switch (202), is outputting result signal when a voltage on the power wire reaches a level predetermine by biasing resistor (R). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Prior Art with Ker et al. teachings and connect a voltage based ESD detection circuit to switching circuit (NOR logic element), because it will allow to detect increase of Vcc (internal) above a predetermine level and enable ESD protection.

9. It appears to Examiner from corrected drawings (Fig. 3) that a driving circuit (48) does not change a logical level of an output from a switching circuit (46) and only adjusts an output signal from Vcc (core) level to Vcc level. In such case when switching circuit (46) does not received input signals (SIGNAL, OEN or DETECT) a NOR circuit outputs a high output signal and driving circuit (48) outputs its high output signal. The high output signal from driving circuit (48) will open FETs M52A, M53A and connect an input of internal circuit (42) to the ground, so internal circuit (42) will not need an ESD protection. In case when switching circuit (46) receive input signals (SIGNAL or OEN) the NOR circuit outputs a low output signal and driving circuit (48) outputs its low output signal.

Gates of FETs M52A, M53A receive low input signal and therefore FETs M52A, M53A are ready to provide an ESD protection for internal circuit (42) in the same way as M50A and M51A and an output of detection circuit (44) will have no effect on protection of enabled internal circuit (42).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact information

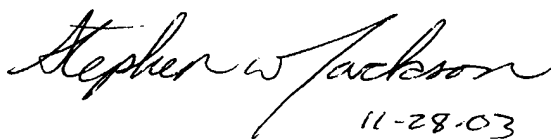
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Benenson whose telephone number is (703) 305-6917. The examiner can normally be reached on M-F (8:20-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703) 308-3119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-3906.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Boris Benenson
Examiner
Art Unit 2836

B.B.


11-28-03

STEPHEN W. JACKSON
PRIMARY EXAMINER